

### C. Remarks

Based on the amendments and remarks to follow, reconsideration of this application is respectfully requested.

In the office action, claims 1-16 and 23 were rejected under 35 USC 103 (a) as being obvious in view of the references cited in the office action. Claims 1, 2, 6, 7, 10-13 were rejected as being unpatentable over Wake et al (U.S. Pub. 2004/0043753A1) in view of Wang (U.S. Pub. 2004/0203630A1). Claims 3-5 were rejected as being unpatentable over Wake et al (U.S. Pub. 2004/0043753A1) in view of Tosic et al (Telecommunications in Modern Satellite, Cable, and Broadcasting services, 1999. 4<sup>th</sup> International Conference on Volume: 2, 13-15 October 1999; Pages 677-680 Vol.2). Claims 8 and 9 were rejected as being unpatentable over Wake et al (U.S. Pub. 2004/0043753A1) and in view of Omata (U.S. Pub. 2002/0007462A1) and Wang (U.S. Pub. 2004/0203630A1). Claims 14 and 23 were rejected as being unpatentable over Wang (U.S. Pub. 2004/0203630A1) in view of Ginzboorg et al (U.S. Patent 6047051). Claim 15 was rejected as being unpatentable over Wang (U.S. Pub. 2004/0203630A1) and Ginzboorg et al (U.S. Patent 6047051) in further view of Leaf (U.S. Patent 5754772). Claim 16 was rejected as being unpatentable over Wang (U.S. Pub. 2004/0203630A1) and Ginzboorg et al (U.S. Patent 6047051) in further view of Adachi (U.S. Patent 6829474 B1).

In the office action, claims 17-22 were objected as being dependent on a rejected base claim but will be allowable provided these claims are rewritten in independent form including all the limitations of the base claim and any intervening

claims. Applicant gratefully acknowledges the notification of allowable subject matter. In this amendment claim 14 has been amended to include the limitations of claim 17 and a new independent claim has been added based on the allowable claims.

In order to more clearly define, and distinctly claim, the present invention from that of the prior art cited in the office action, independent claims 1, 14 and dependent claims 6, 7, and 15 have been amended to recite that the present invention discloses business methods and systems for creation, discovery and delivery of various types of services to mobile users, as disclosed in the current patent application, that facilitates the provision of customization of service by the mobile user and the third party by overwriting variables to suit the need of the mobile user. The support for these recitations is found at pp 9, lines 14-29, pp 10, lines 1-10, pp 11, lines 22-29, pp 12, lines 13-14, pp 17, lines 24-27, pp 18, lines 13-15 and lines 21-22, pp 18, lines 23-26, pp 21, lines 20-21 and lines 26-28, pp 22, lines 5-6 and lines 22-26, pp 23, lines 2-5 and pp 25, lines 6-8 of the present application. In light of the amendment of independent claim 1 and 14, dependent claims 8-13 and 18-23 have been retained..

Further, independent claim 24 and dependent claims 25-28 have been added to define the system and method suitable for providing at least one service to a plurality of mobile users. The support for claims 25-28 is found at pp 8, lines 18-19, pp 15, lines 9-10, pp 17, lines 13-15, pp 20, lines 6-7 and pp 21, lines 14-28. In addition, claims 2-5, 16, and 17 have been cancelled without prejudice. It is submitted that the amendments in claims 1, 6, 7, 14, and 15, and addition of claims 24-28 are thus sufficient to remove the 35 USC 103(a) rejections as the context and the connection of the claim elements is made clear.

The method and system of the present invention, as set forth in claims 1, 6, 7, 14, and 15, as amended, and claim 24-28, as added, provides business methods and systems for creation, discovery and delivery of at least one service to plurality of mobile users.

Claim 1 was rejected as being obvious over Wake et al (U.S. Pub. 2004/0043753A1) in view of Wang (U.S. Pub. 2004/0203630A1). Wake's patent publication provides a method and a system used for billing a user of a wireless device for the use of services hosted by third parties. However, unlike the present patent application, Wake's publication does not disclose service objects that are created by *the mobile service provider*. The created service objects are used for creating services by the mobile service provider in collaboration with the third party. Further, unlike the present patent application, Wake's publication does not disclose the *customization* of the service by the mobile user. The user of a wireless device in Wake's publication can only choose the available services and cannot customize the service.

Further, Wang's patent publication provides a method and apparatus for providing personalized content based on the preference of a user of a mobile device, time of access, and location of the user. However, unlike the present patent application, Wang's publication does not disclose the concept of *service objects* that are created by the mobile service provider. Also, Wang does not disclose creation of service based on the service objects, by the mobile service providers in collaboration with the third parties. The user of a mobile device in Wang's publication is provided with the relevant information. However, unlike the present patent application, the user of the mobile device in Wang's publication cannot customize the service by changing

parameters related to the service. The parameters define the service desired by the user. The user of the mobile device in Wang's application can only select from the available list of the services, and cannot customize a service as per his/her requirement. The concept of customization is explained in detail in the following paragraph.

Claim 1 has been amended to highlight the novelty and distinction from the prior art mentioned in the office action. Claim 1 has been amended to include the concept of creating service objects using business relationships between the mobile service provider and the third party as stated in pp 11, lines 1-3. The business relationship information is encoded in the service objects that define the boundaries and limitations within which the third party create services. The support for this found at pp 11, lines 1-11, pp 16 lines 1-7, and pp 18 lines 2-5. The mobile service provider defines the boundaries and limitations by specifying values to the parameters of the service object. The third party cannot change the values of the parameters specified by the mobile service provider. The third party creates a service using the service object within the boundaries and limitations defined by the mobile service provider. The support for this is found at pp 15, lines 13-15.

Amended claim 1 includes the concept of providing the service objects to the third party for service creation instantly after the creation of the service objects. The support for this is found at pp 22, lines 19-21. The first phrase of claim 1 relating to creating policy based service objects was rejected as being obvious in view of FIG. 3 of Wake's publication, wherein the elements with reference numbers 62, 64, 66 and 68 in the figure of Wake were referred to as service objects. The elements 62, 64, 66 and 68

of the figure represent the various options available for the user of the wireless device to select from. It does not follow from the figure of Wake that these options are service objects. A service object is a blueprint for creating multiple services. The service object contains information about the core network, subscriber profiles, charging models, and the associated applications.

The second phrase of claim 1 relating to creating services using at least one of the created service object was rejected as being obvious in view of Wake's publication disclosing a menu from which the user of a wireless device can select news of interest from the news section. The third party will provide the service that is selected by the user of the wireless device in Wake's publication. However, Wake's publication does not disclose creation of a service by using service objects. The mobile service providers in collaboration with the third parties create services for the users using the service objects.

The sixth phrase of first claim relating to customization of the subscribed service was rejected as being obvious over the selection of baseball and golf information from the sports listings as disclosed in Wang's publication. The user of the mobile terminal in Wang's publication can only choose from the available services and cannot customize a service by changing parameters as per personal requirements. The *customization* of a service is different from *selecting* the available service. The difference of customization of the service from selecting an available service is explained with respect to the following example of customization of the service. In the present patent application, the mobile user can customize a service for listing the hotels in a city on the user's mobile device in real time. The mobile user can customize the service to

provide only top ten hotels or top five hotels of the city. Further, the mobile user can customize other parameters related to the service, such as, to list hotels according to a budget. Hence, the customization of the service is vastly different from selecting a service as disclosed in the Wake's publication. The customization of a service by a user gives the user control over the service required by the user. However, Wake's patent publication does not disclose a method for customization.

Claims 2-5 have been cancelled without prejudice.

Claim 6 was rejected as being obvious over Wake et al (U.S. Pub. 2004/0043753A1) in view of Wang (U.S. Pub. 2004/0203630A1). Claim 6 has been amended to overcome the rejections raised in the office action. Wake's publication discloses that a user of a wireless device will be billed for the services used by the user. However, unlike the present invention, Wake's publication does not disclose that multiple charging models are associated with the service objects. Further, Wake's publication does not disclose that the third party, which creates a service using the service object, selects a charging model for the service from the number of charging models associated with the service object. The support for this is found at pp 23, lines 2-4. The third party associates charging models with the created service. The charging models define the manner in which the users of the service will be billed for using the service. The third party can associate a subscription charging model with a service for the set of users that have subscribed to the service. Further, the third party may associate a pay-per-view charging model with the service for another set of users, whereby the users will be billed for every usage session of the service irrespective of the length of the session or volume of data transported. The support for this is found at

pp 23, lines 2-9.

Claim 7 was rejected as being obvious over Wake et al (U.S. Pub. 2004/0043753A1) in view of Wang (U.S. Pub. 2004/0203630A1). Claim 7 has been retained in view of amendment of independent claim 1. Neither Wake nor Wang discloses defining network elements information and defining gateway services information for creating service objects. Also, the concept of using service object in creating service for the mobile users is not disclosed in the above-mentioned patent publications.

Claim 8 was rejected as being obvious over Wake et al (U.S. Pub. 2004/0043753A1) and in view of Omata (U.S. Pub. 2002/0007462A1) and Wang (U.S. Pub. 2004/0203630A1). Claim 8 has been retained in view of amendment of independent claim 1. The first clause of claim 8 regarding authentication of the third party was rejected in view of an authentication system for accessing a system disclosed in the Omata's patent publication. However, unlike the present invention, Omata's publication does not disclose providing the authorized features only, to the third party, after authentication of the third party. The support for these recitations is found at pp 8, lines 18-19. The third clause of claim 8 relating to configuring service parameters was rejected in view of a user selecting a golf and baseball information from sports listings as disclosed in Wang's publication. As described earlier, selecting a service is different from configuring or customization of the service parameters.

Claim 9 was rejected as being obvious over Wake et al (U.S. Pub. 2004/0043753A1) and in view of Omata (U.S. Pub. 2002/0007462A1) and Wang (U.S. Pub. 2004/0203630A1). Claim 9 has been retained in view of amendment of

independent claim 1. As described earlier, selecting a service is different from configuring or customization of the service parameters.

Claim 10 was rejected as being obvious over Wake et al (U.S. Pub. 2004/0043753A1) in view of Wang (U.S. Pub. 2004/0203630A1). Claim 10 has been retained in view of amendment of independent claim 1. Claim 10 was rejected in view of FIG. 2 of Wake's publication. FIG. 2 of Wake's publication illustrates a cellular telecommunication network. However, as described earlier, Wake's publication does not disclose the concept of predefined service objects that are used to create services for the mobile users. Further, Wake's publication discloses that the third party creates service and not the mobile service provider as claimed in claim 10 of the present patent application.

Claim 11 was rejected as being obvious over Wake et al (U.S. Pub. 2004/0043753A1) in view of Wang (U.S. Pub. 2004/0203630A1). Claim 11 has been retained in view of amendment to independent claim 1. Claim 11 was rejected in view of FIG. 3 of Wake's publication that illustrates a menu of services available for the user to choose from. Wake's publication does not disclose applying network level controls, applying application level controls, and applying system level controls for enabling the provision of the created service to the mobile user. The network level controls include applying controls on the service delivery based on QoS (Quality of Service), bandwidth of the communication channel that is used for the service delivery, and the like. The application level controls include applying limitations on the use of the service based on the age of the subscriber, applying application level controls for customization of the service based on the location from where the request for the service is made, and time

of day at which the request for the service is made, and applying application level controls for limiting rate of billing for a type of service such as, a service for providing sports update to users and the like. The system level controls include applying limitation on a service for the type of device on which the service can be accessed, applying system level controls on a service for the various charging models such as pay-per-use charging model or subscription charging model, that can be associated with the service.

Claim 12 was rejected as being obvious over Wake et al (U.S. Pub. 2004/0043753A1) in view of Wang (U.S. Pub. 2004/0203630A1). Claim 12 has been retained in view of amendment of independent claim 1.

Claim 13 was rejected as being obvious over Wake et al (U.S. Pub. 2004/0043753A1) in view of Wang (U.S. Pub. 2004/0203630A1). Claim 13 has been retained in view of amendment of independent claim 1. Claim 13 was rejected in view of the user selecting baseball and golf information from the sports listings as disclosed in Wang's publication. As described earlier, the customization of the service is different from selecting a service from the available menu of services. Further, customization of the service allows the mobile user of the present patent application to control the service, unlike in Wang's publication wherein the user of the mobile terminal can only select from the available services and cannot customize to suit his/her personal needs.

Claim 14 was rejected as being obvious over Wang (U.S. Pub. 2004/0203630A1) in view of Ginzboorg (U.S. Patent 6047051). In response to the office action, claim 14 has been amended to include the limitations of claim 17 to highlight the novelty of the present invention. The amended claim 14 is the same as allowable claim 17 rewritten

in independent form by including the limitations of the original base claim 14 and as such is allowable.

Claim 15 was rejected as being obvious over Wang (U.S. Pub. 2004/0203630A1) and Ginzboorg et al (U.S. Patent 6047051) in further view of Leaf (U.S. Patent 5754772). In response to office action, claim 15 has been amended to include the concept of the business gateway authenticating the third party for access to information available with the mobile service provider. The support for this is found at pp 22, lines 22-26.

Claims 16 and 17 have been cancelled without prejudice.

Claims 18-23 have been retained in light of the amendment to base independent claim 14.

Claim 24 has been added to define the system suitable for providing at least one service to a plurality of mobile users. The added claim 24 is substantially the same as allowable claim 18, rewritten as an independent claim, and as such is allowable. The system includes a business gateway, a context server, a meta directory, a service catalog, an intermediation gateway and a meta controller.

Dependent claim 25 has been added to define the method of creating policy based service objects. The method of creating policy based service objects comprises assigning variables to service capabilities. The variables assigned to service capabilities define a service object, which is created by combining the service capabilities. Thereafter, the variables in the service object are assigned values for further defining the service object. Relevant policies and rules are selected for the service object. The service object thus obtained is stored. None of the prior art cited in

the office action disclose the concept of creating policy based service objects.

Claim 26 has been added as a dependent claim to amended claim 1. Claim 26 defines the step of creating policy based service object. The mobile service provider provides conditions and actions for the service object that can be implemented with a service created by the service object. None of the prior art cited in the office action disclose the concept of creating policy based service objects. Further, the cited prior art do not disclose providing conditions and actions for the service objects which gives the mobile service provider control over creation and delivery of services to the mobile users.

Claim 27 has been added as a dependent claim to amended claim 1. Claim 27 defines the step of providing the list of service objects to the third party for service creation. The mobile service provider provides only authorized features of the service objects to the third party for service creation. None of the cited prior art disclose the concept of providing the list of service objects to the third party for service creation. Further, the concept of providing only authorized features of the service objects has not been disclosed in the cited prior art.

Claim 28 has been added as a dependent claim to amended claim 1. Claim 28 defines that the service objects are available through graphical user interface to the third party for service creation. The support for this is found at pp 15, lines 9-10 and pp 20, lines 6-7. None of the cited prior art disclose the concept of service objects that are available through the graphical user interface to the third party for service creation.


To summarize, it is submitted that the present patent application describes a method for providing at least one service to a plurality of mobile users. The mobile

users can customize the service at run time to suit personal needs. Whereas, Wake's patent publication describes a method and system for billing a wireless device user for using the services created by a plurality of third parties. Wang's patent publication provides a method and apparatus for providing personalized information to the users of mobile devices based on time, location and profiles of the users using the mobile devices. Omata's patent publication provides a user authentication system. Ginzboorg's patent provides a method for implementation of billing in a telecommunication system for multimedia services. Leaf's patent provides a system that makes on-line transaction processing systems and their associated databases accessible using hyper text transport protocol interfaces. Adachi's patent provides systems for providing multimedia value added services that allow a user to easily obtain desired value-added service.

The method of the present patent application, as amended, provides for a process and functionality that is not disclosed in any of the above mentioned references. Thus, it can be concluded that the claims of the present patent application are not obvious and notice to that effect is earnestly solicited. If the Examiner has any questions regarding this matter, the Examiner is requested to telephone applicants' attorney at the numbers listed below prior to issuing a further action.

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